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84 Immunoassay apparatus and method.

57 Fluorescent immunoassay apparatus and method employ-  
ing a disposable consisting, in a preferred embodiment, of a  
short length of precise diameter capillary tubing having an  
axially disposed optical fiber to which is immobilized a mono-  
layer of a component of the antibody-antigen complex (e.g., an  
antibody), an inert diluent, and a preload of a known amount of  
tagged complement to the immobilized component (e.g., a  
fluorescent-tagged antigen). The dimensions of the fiber and  
the capillary tubing are chosen so as to allow the tube to fill  
itself by capillary action once an end of the tube is immersed  
into the sample. Precise timing and ballistic measurements  
may, if desired, be avoided by insuring the incubation time is  
larger than the diffusion time necessary to scavenge the vo-  
lume between the fiber and the capillary tubing. Fluorometric  
measurement is made by total reflection fluorescence tech-  
niques.

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ACTORUM AB

ITEM 1